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THE FREQUENCY OF FLYING AMONG THE GENERAL PUBLIC

1983

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AIR TRANSPORT ASSOCIATION OF AMERICA

1983

Results of a survey conducted by
The Gallup Organization, Inc.
for
The Air Transport Association of America
1709 New York Avenue, N. W.
Washington, D.C. 20006

INTRODUCTION

Objectives of the Survey

This is a report on one of a series of surveys conducted for the Air Transport Association of America to obtain information about the incidence of flying on commercial airlines among a sample of the nation's adult population. More specifically the survey was designed to find out:

1. *How many adults have ever flown on a commercial airline;*
2. *How many adults have flown on a commercial airline during the last year;*
3. *How many trips were taken during the last year within the United States; how many trips were taken to Canada, to Mexico or the Caribbean, and to other international points;*
4. *How many trips were taken for business purposes and how many trips were taken to visit friends or relatives, to sightsee, or for other purposes to the various areas.*

Trend information is based on surveys conducted with comparable samples conducted in 1971, 1972, 1973, 1974, 1977, 1979 and 1981.

Design of the Research

The survey is based on personal interviews conducted with a national sample of 4,689 adults, 18 years of age and older, during the period of June 24 - August 8, 1983.

The questions asked in 1981 and 1983 differed slightly from those asked in 1977 and 1979. A copy of the 1981 and 1983 questions will be found in the Technical Appendices at the end of the report. The questions relating to charter flights contained in the 1977 and 1979 surveys were omitted in 1981 and 1983 and the destinations which were studied were changed. Specifically, the destinations questioned about in 1981 and 1983 were:

A. Within the United States
B. To Canada
C. To Mexico or the Caribbean (including Puerto Rico)
D. To other international points

In 1979 and 1977, those interviewed were questioned about the following destinations:

A. Within the continental 48 states, excluding Hawaii and Alaska
B. To Hawaii
C. To Alaska
D. To Canada
E. To other international points

This change in destinations was made both on Question 2 -

"How many air trips did you take in the past 12 months to each of the places listed on this card?"

and on Questions 3, 4, and 5 -

"In the past twelve months, of the ____ trips to (destinations A or B, C or D), how many were for each of the reasons listed on this card?"

Thus, trend data on the number of persons traveling within the United States and Canada is not comparable. In 1981 and 1983 only the net figure including Alaska and Hawaii is available, whereas in earlier years these data were not reported as a net.

Trend figures on the number of trips within the U.S. and Canada is included as well as net international travel figures for 1981 and 1983 (including both Mexico/Caribbean and other international destinations).

In addition, as noted in the 1979 report, a change in wording was made in 1977 from the questions asked in previous years. For example, the first question was changed to:

"Have you ever flown on any commercial airline?"

Prior to 1977, the question read:

"Have you ever flown on any of the regular passenger airlines?"

Since 1977, those interviewed have been asked:

"Have you taken any air trips on any commercial airline in the past 12 months?"

Those who had taken any trips were asked:

"How many air trips did you take in the past 12 months to each of the places listed on this card? Please count each round trip as one trip. First, how many trips have you taken to (destination)?"

The places listed included the destinations discussed on page 2.

The surveys prior to 1977 included this question with a different definition of a trip:

"How many trips have you made on a regular passenger airline in the past twelve months? Please count going to your main destination as one trip and your return as a second trip"

It should be noted that the question asked since 1977 about the purpose of trips taken differed from those asked in previous surveys. In 1977, 1979, 1981 and 1983 the question asked included:

"In the past 12 months, of the trips to (destination) how many were mainly for each of the reasons listed on this card? First, how many were for business reasons?"

The reasons listed included business reasons, visiting friends or relatives, and sightseeing/visiting a resort. Similar questions were asked about trips to other destinations.

The earlier surveys included the following question:

> *"How many of the trips you took in the past 12 months were business trips and how many were for pleasure or personal reasons?"*

The report includes trend information on some of the questions. While much of the information sought in 1977, 1979, 1981 and 1983 was about the same as in previous years and some comparisons are reported, it should be kept in mind that any changes in wording can produce results which are not strictly comparable.

As of July, 1983, it is estimated that the national non-institutional population of persons 18 years of age and older is 166,952,000*. This estimate includes all adults except those in such institutions as prisons, hospitals, homes for the aged, etc. The total population of the United States, including children is estimated to be 234,000,000** as of June 1, 1983.

A description of the design of the sample, the composition of the sample and tables of sampling tolerances will be found in the Technical Appendices at the end of the report.

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*Vol. 30, No. 8 - August, 1983, Employment and Earnings report of the Bureau of Labor Statistics.

**Series P-25, No. 936, Population Estimates and Projections, Bureau of the Census.

SUMMARY OF PRINCIPAL FINDINGS
HOW MANY ADULTS HAVE EVER FLOWN AND FLOWN IN THE LAST TWELVE MONTHS

Based on the current survey which was conducted in June and July of 1983, about two out of three (66%) persons 18 years of age and older have ever flown on a commercial airline. This percentage represents 110,188,300 people out of the total adult non-institutional population of 166,952,000. In 1981, a similar proportion of the population had ever flown (65%), representing 103,005,500 adults, and in 1979, 65% or 101,000,000 adults had ever flown. In 1971, the first year the study was conducted, only 49% of the adults had ever flown.

The following table presents the proportions of the demographic groups who have ever flown and those who have flown within the past twelve months. A higher proportion of men (69%) than women (63%) have ever flown, and a considerably larger proportion of the white than of the non-white population have flown (69% and 47% respectively). Among the age groups, the incidence of having ever flown on a commercial airplane is higher among those 25 to 49 years of age (72%) than among older (62%) or younger (59%) people. As might be expected, the incidence of having ever flown is directly related to income, being highest among those with incomes of $40,000 and over (88%), and declining to 75% among those with incomes of $20,000-$39,999, and to even lower levels among those with incomes of $10,000-$19,999 (60%), or less than $10,000 (47%). Additionally, those in white collar households, particularly the professional and business group (84%) are more likely than others to have flown, and residents of the West (79%) are more likely than those in the East (71%), Midwest (64%), or South (55%) to have flown.

Just over one out of five (22%) reported having flown in the twelve months preceding the interview (i.e. July, 1982 to July, 1983), which projects to 36,729,400 American adults. It should be kept in mind that all sample percentages are subject to sampling error. The sampling error at the 95 in 100 confidence level for the preceding projection of 36,729,400 is ±2,625,900. Thus, 95 times out of a hundred the average of repeated sampling would show that between 34,103,500 and 39,355,300 American adults flew in the 12 months from July, 1982 to July, 1983. The comparable population projection in 1981 for adults who flew in the year preceding the interview was 38,032,800 (±2,592,800). Demographic groups with the highest proportions of those who had flown in the last year were those with incomes of $40,000 and over (49%), those in the professional and business occupation group (41%), and residents of the West (33%).

	Ever Flown								Flown In Past 12 Months							
	'71 %	'72 %	'73 %	'74 %	'77 %	'79 %	'81 %	'83 %	'71 %	'72 %	'73 %	'74 %	'77 %	'79 %	'81 %	'83 %
All Adults	49	54	54	55	63	65	65	66	21	23	25	24	25	27	24	22
Sex of Respondent																
Men	53	58	58	61	67	67	68	69	24	27	27	27	27	28	25	23
Women	46	51	51	50	59	63	62	63	18	20	23	22	22	25	22	21
Race of Respondent																
White	51	57	57	57	65	68	67	69	21	24	26	25	25	28	25	24
Non-White	28	32	33	39	45	39	50	47	13	16	17	22	18	16	16	12
Age of Respondent																
18-24 years	52	54	50	50	58	57	58	59	27	28	25	26	24	26	23	20
25-34 years	60	62	66	63	70	69	72	71	22	26	29	27	25	26	27	26
35-49 years	46	58	55	59	67	71	69	73	18	24	28	27	27	28	26	24
50 yrs. & older	44	48	49	51	58	63	61	62	18	20	21	21	23	26	20	20
Occupation of Chief Wage Earner																
Professional & Business	70	75	75	78	83	85	82	84	37	42	42	44	43	45	42	41
Clerical & Sales	66	64	67	66	74	64	75	70	29	29	37	30	27	29	24	20
Manual Workers	41	45	45	49	54	57	58	57	14	15	17	19	16	17	17	14
Non-Labor Force	43	45	45	46	53	58	55	60	16	15	17	15	17	21	16	15
Size of Community																
1,000,000 & over	63	65	64	68	68	69	73	74	28	30	34	35	30	29	29	26
500,000-999,999	61	67	71	70	71	73	74	73	34	37	37	35	33	35	29	28
50,000-499,999	55	58	59	55	68	66	70	69	25	25	26	27	28	30	28	27
2,500-49,999	39	43	50	57	60	60	60	59	13	17	21	23	19	23	19	16
Under 2,500	35	44	38	40	52	59	52	57	10	14	15	13	17	20	16	14
Region of the Country																
East	51	57	59	59	65	67	66	71	21	25	30	27	25	28	24	24
Midwest	45	51	51	50	59	62	61	64	17	20	23	20	23	22	20	16
South	39	45	43	45	53	55	56	55	18	19	18	21	19	22	20	19
West	68	70	70	73	80	81	81	79	29	32	33	32	35	39	33	33

EVER FLOWN IN THE PAST TWELVE MONTHS BY INCOME GROUPS

Trend information by income groups was not reported in the previous table because of large changes which have occurred in recent years in family income due to changes in the value of the dollar. The results for 1983 in the proportions of each groups who have ever flown and have flown in the last year are shown in the table below. Notably, twice as many in the top income group have flown in the past 12 months (49%, $40,000 and over), than among those with more moderate incomes of $25,000 - $39,999 (26%).

Family Income	Ever Flown %	Flown In Past 12 Months %
$40,000 and over	88	49
$25,000 - $39,999	77	26
$20,000 - $24,999	71	21
$15,000 - $19,999	61	17
$10,000 - $14,999	60	17
$ 5,000 - $ 9,999	51	10
Under $5,000	40	8

The results were also tabulated by family income groups within age groups. The following table represents the percentage of respondents who have flown in the last year by income and age group. The data suggests that income is somewhat less likely to affect the flying habits of 18-24 year olds than older people. For example, the incidence of having flown in the past year is only slightly lower among young adults with annual family incomes of $15,000 - $24,999 (18%) than among those with incomes of $25,000 and over (28%), whereas among older people, particularly those 35 and older, the incidence of having flown in the past year is considerably higher among the affluent than others.

EVER FLOWN IN THE PAST TWELVE MONTHS BY INCOME GROUPS (Continued)

Family Income	Flown in Past Year			
	18-24 Years	25-34 Years	35-49 Years	50 Years and Older
	%	%	%	%
$25,000 or more	28	38	36	35
$20,000 - $24,999	10	34	19	21
$15,000 - $19,999	23 (18*)	16	11	17
$10,000 - $14,999	14	18	9	20
Under $10,000	17	8	10	7

*Due to small sample size of respondents 18-24 years of age with annual household incomes of $20,000 - $24,999, an average of two adjacent income categories is shown.

HOW MANY TRIPS IN PAST TWELVE MONTHS

Those who had ever flown were asked how many trips they had made on a commercial airline during the twelve months preceding the survey. Approximately half of those who flew during the past year took only one trip. Results were as follows for the eight surveys conducted since 1971:

	Percentage of All Persons Interviewed							
	1971 %	1972 %	1973 %	1974 %	1977 %	1979 %	1981 %	1983 %
Ever Flown	49	54	54	55	63	65	65	66
Flown but not in past 12 months	28	31	29	31	38	38	41	44
Flown in past 12 months	21	23	25	24	25	27	24	22
Number of Trips**								
1 Trip	12	13	15	13	14	13	12	10
2 Trips	4	4	5	5	4	6	5	6
3 Trips	2	2	2	2	3	2	3	2
4-6 Trips	2	2	2	3	2	3	2	2
7-9 Trips	*	1	*	*	1	1	1	1
10 or more trips	1	1	1	1	1	2	1	1
Never Flown	51	46	46	45	37	35	35	34
TOTAL	100	100	100	100	100	100	100	100
Number of Interviews	(3047)	(3137)	(3120)	(3066)	(3030)	(3101)	(4606)	(4689)

* Less than one-half of one percent

** In surveys before 1977, one trip was defined as going to the main destination and the return was a second trip. In 1977, 1979, 1981 and 1983, a round trip was considered one trip. Therefore for surveys before 1977 one trip was by earlier definition one or two trips, two trips were 3 or 4 trips, etc. The number of trips shown on the table are for the 1977 definition.

HOW MANY TRIPS IN PAST TWELVE MONTHS? (Continued)

The table which follows shows that slightly less than half (47%) of those who have flown during the last twelve months have made only one trip. These infrequent fliers accounted for 15% of all trips taken in the last 12 months. Moderate fliers who took between two and twelve trips made up half (50%) of those who flew in the last 12 months and account for more than half (54%) of all trips. Frequent fliers, those who took more than twelve trips during the last 12 months, included only three percent (3%) of the fliers but they took 31% of all trips.

		Flew In Last 12 Months							
	Number of Trips	Fliers				Trips			
		1977 %	1979 %	1981 %	1983* %	1977 %	1979 %	1981 %	1983* %
Infrequent Fliers (1 Trip)	1	56.5	48.6	49.1	46.8	20.4	13.9	16.1	15.0
Moderate Fliers (2-12 Trips)		40.3	47.7	47.6	50.2	51.6	49.9	53.3	53.7
	2	17.5	23.5	22.2	25.5	12.6	13.4	14.6	16.3
	3	10.2	8.2	10.8	9.3	11.0	7.0	10.7	8.9
	4	3.8	5.3	6.4	6.8	5.5	6.0	8.4	8.7
	5	2.4	2.3	2.3	2.3	4.3	3.3	3.8	3.8
	6	3.0	2.1	1.4	2.3	6.5	3.6	2.7	4.5
	7	.7	1.2	1.7	.9	1.7	2.3	3.9	2.1
	8	.8	1.4	.8	1.0	2.2	3.1	2.2	2.6
	9	.3	.5	.3	.5	1.0	1.2	.9	1.3
	10	.3	1.5	.7	.7	1.1	3.6	2.4	2.1
	11	.5	.4	.1	.3	1.8	2.1	.2	1.0
	12	.9	1.3	.9	.6	3.9	4.3	3.5	2.4
Frequent Fliers (Over 12 Trips)		3.2	3.7	3.3	3.0	28.0	36.2	30.6	31.3
		100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* 1983 results based on 1116 respondents who have flown in the past year accounting for for 3370 trips.

DESTINATION OF AIR TRIPS

The table below reports the percentage of all adults who made one or more trips to each destination listed and also the percentage of those who had flown in the last year who made one or more trips to each destination. The totals exceed the percentage who had flown in the last year since some of the people flew to more than one destination.

	All Adults	Flown In Last 12 Months
	%	%
Within the United States	20	91
To Canada	1	5
To Mexico or the Caribbean	2	11
To other International Points	3	13
Totals	26	120
Number of Interviews	(4689)	(1116)

The above table reports the percentage of people who flew to each destination. The table below shows the trend since 1977 in the percentage of trips taken to these destinations. Over the four surveys, the proportion of trips taken within the United States has decreased somewhat, while the proportion of trips to Canada and to other intarnational destinations shows a slight increase.

	Percent of Trips*			
	1977 %	1979 %	1981 %	1983 %
Within the United States	91	89	87	85
To Canada	1	2	3	4
To other International Points	8	9	10	11
To Mexico or the Caribbean	(Not Tabulated)		5	5
To other International Points (other than Mexico & Caribbean)			5	6
Totals	100	100	100	100

*See note on page 2 about the change in destination questions on the 1981 and 1983 surveys.

PURPOSE OF TRIPS TAKEN

Those who had flown during the year preceding the survey were asked how many trips taken during the last twelve months were for business and how many were taken for other reasons such as visiting friends or relatives, sightseeing, etc. The table below shows that the percentage of all adults who have taken business trips in the last year hasn't changed very much since 1971, while the percentage taking pleasure trips has. In 1971, eight percent of adults had taken business trips (5% business trips only plus 3% both kinds). In 1983, eight percent also took business trips. The proportion taking pleasure/personal trips increased from 16 percent to 22 percent from 1971-1979, but declined to 19% in 1981 and 17% in 1983.

	Percentage of All Adults								Percentage of Those Who Have Flown In Past 12 Months							
Type of Trip Taken	'71 %	'72 %	'73 %	'74 %	'77 %	'79 %	'81 %	'83 %	'71 %	'72 %	'73 %	'74 %	'77 %	'79 %	'81 %	'83 %
Business trips only	5	6	6	5	6	5	5	5	23	25	22	22	23	18	21	21
Pleasure/Personal trips only	13	14	17	16	16	18	15	14	65	61	68	66	64	68	64	64
Both kinds of trips	3	3	2	3	3	4	4	3	12	14	10	12	13	14	15	15
TOTAL FLOWN IN PAST YEAR	21	23	25	24	25	27	24	22	100	100	100	100	100	100	100	100
Number of Business Trips																
None	13	14	17	16	16	18	15	14	65	61	68	66	64	68	64	64
1-3 trips	6	7	6	6	7	6	7	6	27	28	25	26	27	22	27	29
4-6 trips	1	1	1	1	1	1	1	1	3	5	4	4	4	3	4	3
Over 6 trips	1	1	1	1	1	2	1	1	5	6	3	4	5	7	5	4
TOTAL FLOWN IN PAST YEAR	21	23	25	24	25	27	24	22	100	100	100	100	100	100	100	100
Number of Pleasure/ Personal Trips																
None	5	6	6	5	6	5	5	5	23	25	22	22	23	19	21	21
1-3 trips	14	16	18	18	18	20	17	16	69	70	72	73	71	74	72	71
4-6 trips	1	1	1	1	1	1	1	1	6	5	5	4	4	5	5	7
Over 6 trips	1	*	*	*	*	1	1	*	2	*	1	1	2	2	2	1
TOTAL FLOWN IN PAST YEAR	21	23	25	24	25	27	24	22	100	100	100	100	100	100	100	100

*Less than one-half of one percent.

PURPOSE OF TRIPS TAKEN (Continued)

The proportions of those who had taken one or more trips during the last year on commercial airlines for various reasons are as follows:

	Percent of Those Who Flew In Past 12 Months			
Purpose of Air Trips	1977 %	1979 %	1981 %	1983 %
Pleasure or Personal Reasons	77	81	79	79
Visiting friends or relatives	53	55	55	54
Sightseeing/visiting a resort	20	25	26	26
Other reasons	11	11	7	10
Business Reasons	36	32	36	36
	113*	113*	115*	115*

The division between business and pleasure/personal trips for six surveys follows:

	Percent of Total Trips Taken in 12 Months**					
	1973 %	1974 %	1977 %	1979 %	1981 %	1983 %
Business trips	46	49	52	55	52	51
Pleasure/personal trips	54	51	48	45	48	49
	100	100	100	100	100	100

The 1983 distribution of business vs. pleasure fliers and trips is very similar to that shown in 1977 and 1981.

* Total exceeds 100% since some adults took more than one kind of trip. Also the sum of various kinds of pleasure/personal trips exceeds the percent taking such trips because of multiple answers.

**See note page 4 for comment about this table

PURPOSE OF TRIPS TAKEN (Continued)

As reported in the following table, more than half (54%) of all domestic trips were for business reasons while slightly less than half (43%) of trips to international destinations such as Europe and Asia and only one in six trips (17%) to Mexico or the Caribbean were for business reasons.

	Percent of Trips Taken In Last 12 Months			
	Domestic* %	Mexico Or Caribbean %	Other International %	Total Trips %
Business Trips	54	17	43	51
Pleasure/Personal Trips	46	83	57	49
Visiting friends of relatives	30	17	21	29
Sightseeing/visiting a resort	12	64	30	15
Other reasons	4	2	6	5
Total Trips	100	100	100	100
Number of Trips	(2990)	(156)	(224)	(3370)

As might be expected, more than seven in ten (73%) business trips were taken by men, while a slight majority of pleasure trips (55%) were taken by women. However, as shown in the table below, the proportion of business trips taken by women has steadily increased in the past six years, from 13% in 1977 to 27% in the current survey. Little variation in the proportion of pleasure trips taken by men and women is seen during the same time period.

	Percent of Business Trips Taken In Past 12 Months			
Sex of Respondent	1977 %	1979 %	1981 %	1983 %
Men	87	82	81	73
Women	13	18	19	27
	100	100	100	100

*All 50 states plus Canada.

Sex of Respondent	Percent of Pleasure/Personal Trips Taken In Past 12 Months			
	1977 %	1979 %	1981 %	1983 %
Men	50	42	44	45
Women	50	58	56	55
	100	100	100	100

Additionally, the non-white segment of the population took three percent of all business trips and seven percent of all trips taken for pleasure or personal reasons. Fliers 35 years of age or older account for 57 percent of business trips and 58 percent of trips taken for pleasure or personal reasons. Two in three (65%) business trips were taken by those with family incomes of $40,000 or more, while only one in three pleasure trips (34%) was taken by those with incomes of $40,000 or more. Two in three (66%) business trips, but only half (50%) of the pleasure trips were taken by persons whose head of household was in the professional and business group.

PREVIOUS SURVEYS BY THE GALLUP ORGANIZATION

Question: "Have you ever flown any of the regular passenger airlines?

	1962	1964	1965	1966	1970
National	33%	34%	38%	42%	47%
Sex					
Men	37		42		51
Women	30		34		44
Age					
21 - 34	39		46		54
35 - 49	33		37		50
Over 50	30		33		40
Occupation					
Professional/Business	57		63		72
Clerical/Sales	45		43		60
Manual	26		29		37
Farmers	16		14		24
Non-labor force	31		34		40
Region of Country					
East	39		41		52
Midwest	29		33		42
South	22		30		37
West	50		55		67
Income					
$15,000 and over					80
10,000 - $14,999			65**		59
7,000 - 9,999	57*		46		42
5,000 - 6,999	32		34		39
3,000 - 4,999	24		28		30
Under $3,000	17		20		27

* In the 1962 study, the income survey category was $10,000 and over.
** In the 1965 study, the income survey category was $15,000 and over.

COMPOSITION OF THE SAMPLE

	Per Cent
National	100.00
Sex of Respondent	
Men	48.0
Women	52.0
	100.0
Race of Respondent	
White	84.4
Non-white	15.6
	100.0
Age of Respondent	
18-24 years	17.3
25-34 years	20.6
35-49 years	23.6
50 years and older	38.4
Undesignated	.1
	100.0
Occupation of Chief Wage Earner	
Professional & Business: Professional, technical, and kindred workers (e.g., engineers, accountants, nurses); Executives (e.g., managers, officials, proprietors, public administrators)	25.8
Clerical & Sales: Clerical and kindred workers (e.g., mail carriers, telephone operators); Sales and kindred workers (e.g., retail clerks, claim examiners)	7.6
Manual Workers: Foremen, craftsmen and kindred workers (e.g., railroad engineers, machinists, linesmen, maintenance, painters); Operatives and kindred workers (e.g., coal miners, truck drivers, butchers, apprentices); Service workers, laborers	36.8
Farmers: Farm owners, farm managers, farm foremen, farm laborers	2.9
Non-Labor Force:	20.2
Other Occupation:	3.4
Undesignated	3.3
	100.0

	Per Cent
Annual Family Income	
$40,000 and over	12.8
$25,000 - $39,999	19.5
$20,000 - $24,999	9.5
$15,000 - $19,999	14.0
$10,000 - $14,999	15.1
$ 5,000 - $ 9,999	14.9
Under $5,000	8.9
Undesignated	5.3
	100.0
Size of Community	
1,000,000 and over, including urban fringe	21.5
500,000 - 999,999, including urban fringe	12.4
50,000 - 499,999	25.3
2,500 - 49,999	14.6
Under 2,500	26.2
	100.0
Region of Country	
East: Maine, New Hampshire, Rhode Island, Connecticut, Vermont, Massachusetts, New York, New Jersey, Pennsylvania, West Virginia, Delaware, Maryland, District of Columbia	26.7
Midwest: Ohio, Indiana, Illinois, Michigan, Minnesota, Wisconsin, Iowa, North Dakota, South Dakota, Kansas, Nebraska, Missouri	27.6
South: Kentucky, Tennessee, Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Texas, Arkansas, Oklahoma, Louisiana	28.0
West: Arizona, New Mexico, Colorado, Nevada, Montana, Idaho, Wyoming, Utah, California, Washington, Oregon, Alaska, Hawaii	17.7
	100.0

- N O T E -

Allowance for persons not a home was made by means of "times-at-home" technique, rather than by "call-backs". Either procedure is a standard method for reducing the sample bias that would otherwise result from underrepresentation in the sample of persons who are difficult to find at home. All results reported, including the composition of the sample, are based on data in which a "times-at-home" weighting has been incorporated. The actual number of interviews made for various population groups is reported in the findings.

THE DESIGN OF THE SAMPLE

The sampling procedure is designed to produce an approximation of the adult civilian population, eighteen years and older, living in the United States, except for those persons in institutions such as prisons or hospitals.

The design of the sample is that of a replicated, probability sample down to the block level in the case of urban areas, and to segments of townships in the case of rural areas. Approximately three hundred sampling locations are used in each survey. Interpenetrating samples can be provided for any given study when appropriate.

The sample design included stratification by these four size-of-community strata, using 1970 Census data: (a) cities of population 1,000,000 and over; (b) 250,000 to 999,999; (c) 50,000 to 249,999; (d) all other population. Each of these strata was further stratified into seven geographic regions: New England, Middle Alantic, East Central, West Central, South, Mountain, and Pacific. Within each city size-regional stratum, the population was arrayed in geographic order and zoned into equal sized groups of sampling units. Pairs of localities were selected in each zone, with probability of selection of each locality proportional to its population size in the 1970 Census, producing two replicated samples of localities.

Within localities so selected for which the requisite population data are reported, subdivisions were drawn with the probability of selection proportional to size of population. In all other localities, small definable geographic areas were selected with equal probability.

Separately for each survey, within each subdivision so selected for which block statistics are available, a sample of blocks or block clusters is drawn with probability of selection proportional to the number of dwelling units. In all other subdivisions or areas, blocks or segments are drawn at random or with equal probability.

In each cluster of blocks and each segment so selected, a randomly selected starting point is designated on the interviewer's map of the area. Starting at this point, interviews are required to follow a given direction in the selection of households until their assignment is completed.

Interviewing is conducted at times when adults, in general, are most likely to be at home, which means on weekends, or if on weekdays, after 4:00 P.M. for women and after 6:00 P.M. for men.

Allowance for persons not at home is made by a "times-at-home" weighting* procedure rather than by "call-backs". This procedure is a standard method for reducing the sample bias that would otherwise result from under-representation in the sample of persons who are difficult to find at home.

The pre-stratification by regions is routinely supplemented by fitting each obtained sample to the latest available Census Bureau estimates of the regional distribution of the population. Also minor adjustments of the sample are made by educational attainment by men and women separately, based on the annual estimates of the Census Bureau (derived from their Current Population Survey) and by age.

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* Politz, A. and Simmons, W., "An Attempt to Get the 'Not at Homes' into the Sample without Callbacks", JOURNAL OF THE AMERICAN STATISTICAL ASSOCIATION, Volume 44 (March, 1949), pp. 9-31